Description of a new *Eudyaria* GROTE, 1896 from Paraguay (Lepidoptera: Saturniidae, Hemileucinae, Hemileucini)

Carlos G. C. MIELKE and Ulf DRECHSEL

Carlos G. C. Mielke, Caixa Postal 1206, 84.145-000 Carambeí, Paraná, Brazil; cmielke1@uol.com.br Ulf Drechsel, General Aquino 694, Asuncion, Paraguay; ulfdrechsel@hotmail.com

Abstract: Eudyaria sigridae sp. n. from Paraguay is described and compared to the similar species *E. zeta* (Berg, 1885) from Central-Southern Brazil, Uruguay, Bolivia and Argentina, and *E. venata* (Butler, 1871) from Central-Southern Brazil, Argentina and Paraguay. It differs by the wing pattern, foretibia spine, epiphysis length, colour of abdomen dorsally, and 8th sternite. Male holotype is deposited in the collection Padre Jesus S. Moure in Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brazil.

Key words: distribution, taxonomy, Neotropical fauna.

Descrição de uma nova *Eudyaria* GROTE, 1896 do Paraguai (Lepidoptera: Saturniidae, Hemileucinae, Hemileucini)

Resumo: Eudyaria sigridae sp. n. do Paraguai é descrita e comparada com as espécies similares E. zeta (Berg, 1885) do centro-sul brasileiro, Uruguai, Bolívia e Argentina e E. venata (Butler, 1871) do centro-sul brasileiro, Argentina e Paraguai. Difere-se principalmente pelo seguintes caracteres: padrão alar, pelo espinho da tíbia anterior, coloração do abdomen e o oitavo esternito. O holótipo macho está depositado na coleção Padre Jesus S. Moure no Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brasil.

Beschreibung einer neuen *Eudyaria* GROTE, 1896 aus Paraguay (Lepidoptera: Saturniidae, Hemileucinae, Hemileucini)

Zusammenfassung: Die neue Art Eudyaria sigridae sp. n. aus Paraguay wird beschrieben und mit den Verwandten E. zeta (Berg, 1885) aus dem zentralen Südbrasilien, Uruguay, Bolivien und Argentinien und E. venata (Butler, 1871) aus dem zentralen Südbrasilien, Argentinien und Paraguay verglichen. Die neue Art unterscheidet sich in Flügelmuster und -färbung, Färbung der Dorsalseite des Abdomens, Vordertibienbedornung, Länge der Epiphyse und der Form des 8. Sternits. Der männliche Holotypus befindet sich in der Sammlung "Padre Jesus S. Moure" im Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brasilien.

Introduction

According to Lemaire (1996, 2002), the genus *Eudyaria* Grote, 1896 (= *Nammuncuraia* Orfila, 1951) is known from 2 species: *E. zeta* (Berg, 1885) and *E. venata* (Butler, 1871).

Eudyaria is characterized by several features within Saturniidae: Hemileucinae. According to Lemaire (2002), it is distinct by the absence of the lines on all four wings and by the prominence of the venation on the forewing, besides the antennae structure and the presence of apical spines on fore- and median tibia. Some of these traits are discussed.

The present publication raises to 3 the total number of *Eudyaria* species.

Collection abbreviation:

DZUP (DZ)

Col. Padre Jesus S. Moure, Departamento de Zoologia, Universidade Federal do Paraná, Curitiba, Paraná, Brazil.

HT holotype.

Eudyaria sigridae sp. n.

Figs. 1a, 1b.

Holotype ♂: "Holotypus, *Eudyaria sigridae* C. MIELKE & U. DRECHSEL det. 2008", "Paraguay, Dep. Kanindeyu, Tava Yopoi, S 24°22', W 55°53', U. DRECHSEL leg.", "DZ 15.590". Donated by the coauthor and deposited in DZUP. Figs. 1a, 1b. — No paratypes.

Etymology. The name is a dedication to Sigrid Drechsel (Paraguay), coauthor's daughter, for her enthusiasm on biology.

Note. The HT and single specimen was found in nature dead and dry in a spider net.

Description

♂ (Figs. 1a, 1b). Wingspan: 95 mm, forewing length: 46 mm. Head: antennae mostly lacking with straw colored scape; front dark reddish-brown; labial palpi 3-segmented although 3rd segment not present. Thorax dorsally dark reddish-brown and ventrally lighter just as the legs; fore- and median tibia with 2 and 1 spines on outer apical angle, respectively; the former bearing an epiphysis of ¹/₃ of its length; tibial spurs 0-2-3.

Forewing: elongated, outer margin convex, ground colour brown without markings except by the black trace like discal spot with a dense sprinkling of dark brown scales, venation not marked. Hindwing: slightly darker, more reddish, and speckled as forewing with black oval discal spot. Ventrally, both wings reddish-brown. Abdomen dorsally black with coloured reddish brown rings posteriorly on each segment, ventrally dark reddish-brown; 8th sternite without posterior projections (Fig. 2).

♂ genitalia (Figs. 3, 4). See Lemaire (2002). The new species does not differ much from both the other species, but it seems that both uncus and apparatus are wider, the former more pronounced dorsally.

Female. Unknown.

Immature stages. Unknown.

Geographical distribution. *E. sigridae* sp. n. is only known from the type locality.





Fig. 1: Eudyaria sigridae sp. n. HT \eth , dorsal (a), ventral (b) view. — Scale bars in mm.

Discussion

Eudyaria sigridae sp. n. is similar to *E. zeta and E. venata*, from which it is however easily distinguished by several characters. These are listed in Tab. 1.

Table 1: Diagnostic differences between Eudyaria species.

<i>ਹੈ</i>	E. sigridae sp. n.	E. venata	E. zeta
wing venation	not marked	marked	marked
dorsal colour of the abdomen	black, ringed reddish posteriorly	brown	brown
foretibia spines	2	1	1
epiphysis length	1/3 of foretibia	2/3 of foretibia	2/3 of foretibia
hindwing discal spot	present	lacking or very small	present
spines on 8th abdominal sternite	lacking	present	present

Two foretibia spines, wing venation non marked, ringed abdominal segments, and 8th sternite without sublateral spines posteriorly seem to be unique within *Eudyaria*.

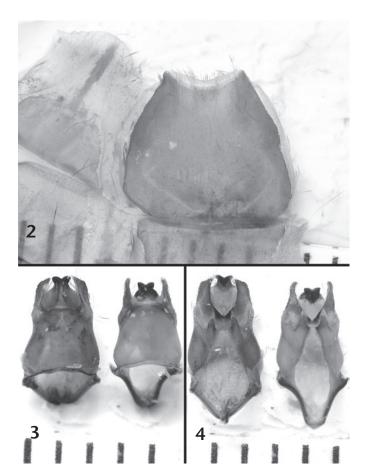


Fig. 2–4: & genitalia. Fig. 2: Eudyaria sigridae sp. n., & HT 8th sternite, ventral view. – Fig. 3: Eudyaria sigridae sp. n. and E. zeta, & genitalia, dorsal view. Left: HT Eudyaria sigridae sp. n., and right: E. zeta. – Fig. 4: Eudyaria sigridae sp. n. and E. zeta, & genitalia, ventral view. Left: HT Eudyaria sigridae sp. n., and right: E. zeta. – Scale bars in mm.

Acknowledgements

Dr. Wolfgang A. Nässig (Frankfurt am Main) for all his comments and helpful suggestions.

References

Lemaire, C. (1996): 117. Saturniidae. — In: Heppner, J. B. (ed.), Atlas of Neotropical Lepidoptera. Checklist: Part 4B (Volume 5B). Drepanoidea — Bombycoidea — Sphingoidea. — Gainesville, Washington, Hamburg, Lima, Taipei, Tokyo (Association for Tropical Lepidoptera; Scientific Publ.), XLIX + 87 pp, 14 figs.

—— (2002): The Saturniidae of America. Les Saturniidae Americains (= Attacidae), vol. 4, Hemileucinae. — Keltern (Goecke & Evers); part A: [1]-688, part B: [689]-1388; part C: col. pls. 1-126, ES1-ES14, 143 pp. without pagination.

Received: 22. iv. 2009